

UNIT SIZE	CFM	GPM	PD/FT	COOLING CAP (BTUH)		% RECYCLED AIR	ELECT. RESIST. HTG. CAP (BTUH)	REMARKS
				SENS.	TOTAL			
(A)	210	2.4	7	6605	8850	13105	5200	2.5
(B)	420	3.7	6.7	10560	13570	19125	5200	2.5
(C)	520	4.7	8.5	12255	17025	24080	5200	2.5

* COOLING CAPACITY BASED ON ENT. AIR @ 77° DB - 64° WB AND 52° ENT. WATER TEMP.
 ** HEATING CAPACITY BASED ON ENT. AIR @ 70° AND 70° ENT. WATER TEMP.

HTG. No.	SERVING	LOCATION	CFM	HEATING CAPACITY		MIN. STAGE	REMARKS
				MIN. BTUH	NOM. KW		
THRU 16	TYPICAL FLR	TYPICAL FLR MECH. R.M.S.	4800	18265	6	2	
17 & 18	TOP FLR	TOP FLR MECH. RM.	6000	18265	6	2	
19	FIRST FLR LOBBY	FIRST FLR MECH. RM.	4000	151,000	45	3	
20	FIRST FLR RENTAL SPACE	FIRST FLR MECH. RM.	4350	85,300	25	3	
21, 22 & 24	FIRST FLR RENTAL SPACE	FIRST FLR MECH. RM.	2000	51,190	15	3	
23 & 25	FIRST FLR RENTAL SPACE	FIRST FLR MECH. RM.	4350	102,300	30	3	

NOTE: ALL DUCT HEATERS - 1000 FPM MAX. FACE VELOCITY AND 0.1" MAX. P.D.

UNIT No.	SERVING	UNIT LOCAT.	CFM	EXT S.F.	HP	RPM	# COOLING CAPACITY		MIN. CAP. CFM	NOM. UNIT CAP. TONS	REMARKS
							ENT. AIR DB/WB	LYS. AIR DB/WB			
1 THRU 16	TYPICAL FLOORS	TYP. FLR MECH. RM.	4800	5/8"	3	710	82.9/68.8	60/53	37	710	15
17 & 18	TOP FLOOR	TOP FLR MECH. RM.	6000	5/8"	3	800	82.9/68.2	61/59.2	43	710	15
19	FIRST FLR LOBBY	FIRST FLR MECH. RM.	4000	1/2"	3	992	79.2/66.2	60.3/51.6	23	500	10
20, 22, 25	FIRST FLR RENTAL SPACE	FIRST FLR MECH. RM.	4850	1/2"	5	824	80.9/67.7	53.0/36.8	27	1000	15
21, 22, 24	FIRST FLR RENTAL SPACE	FIRST FLR MECH. RM.	1950	1/2"	1 1/2	762	81.7/68.4	55.9/36.6	16	540	7 1/2

* COOLING CAPACITY BASED ON 92°F ENT. WATER TEMP.

FAN No.	SERVING	LOCATION	CFM	S.P.	HP	FAN RPM	OV. RPM	ZONE PAKING @ 5 FT	FAN TYPE	REMARKS
1	TOILET EXH. RISERS 1-2	PENTHOUSE	7315	3/8"	3	630	1800	-	F.C. UTILITY SET	FLR MOUNTED
2, 3, 4, 5, 6 & 7	WET STACK EXH. RISERS	ROOF	800	1/2"	1/6	934	-	6	PURCH. DRIVE CENT. ROOF FAN	ROOF MOUNTED
8	ELEV. MACH. RM.	ELEV. MACH. RM.	10,000	1/4"	1 1/2	900	-	-	BELT DRIVE PROPELLER	WALL MOUNTED
9	PENTHOUSE STORAGE RM.	PENTHOUSE STORAGE RM.	390	3/8"	1 1/5	1030	-	12	DIRECT DRIVE IN-LINE CENT.	CLG. MOUNTED
10 & 14	MECH. 1 ELEV. RM 1ST FLR	MECH. RM 1ST FLR	150	1/8"	1/40	860	-	6.2	DIRECT DRIVE IN-LINE CENT.	CLG. MOUNTED
11	STAIR #1	1ST FLR	13200	1"	5	611	1606	-	BELT DRIVE CAB. FAN	MTD. ABOVE CEILING
12	STAIR	1ST FLR	11,200	1"	5	640	1700	-	BELT DRIVE CAB. FAN	MTD. ABOVE CEILING
13	TRASH RM.	TRASH RM.	150	1/8"	1/40	1550	-	3.1	DIRECT DRIVE CENT. CLG. FAN	CLG. MOUNTED
15	ENGINEER'S OFFICE	PENTHOUSE	60	1/4"	1/40	550	-	1.3	DIRECT DRIVE CLG. FAN	CLG. MOUNTED
16	MECHANICAL PENTHOUSE	MECHANICAL PENTHOUSE	1250	3/8"	1/5	-	-	-	BELT DRIVE PROPELLER	WALL MOUNTED W/ BACK DRAFT DAMPER
17	FUTURE KIT. HOOD	ROOF	8000	3"	7 1/2	953	1553	-	B.T. UTILITY SET	ROOF MOUNTED

HUMIDIFIER No.	SERVING	LOCATION	MIN. CAP. LBS./HR.	TYPE	KW	REMARKS
H-1 THRU H-6	TYP. FLR.	TYP. FLR. MECH. RMS	12.5	EVAP. FAN TYPE	4	
H-17	TOP FLR.	TOP FLR. MECH. RMS	12.5	EVAP. FAN TYPE	4	

SYMBOL LIST

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|--------|--|------|----------------------------------|
| KG | GATE VALVE IN DROP OR RISE | -D- | CONDENSATE DRAIN |
| AC-1 | SELF-CONTAINED A/C UNIT DESIGNATION | -CR- | CONDENSER WATER RETURN |
| DH-1 | DUCT HEATER DESIGNATION | -CS- | CONDENSER WATER SUPPLY |
| H-1 | HUMIDIFIER DESIGNATION | → | DIRECTION OF FLOW |
| (A) | PERIMETER RM HEATING & COOLING UNIT SIZE | ↘ | PITCH DOWN IN DIRECTION OF DRAIN |
| (TE) | TOILET EXHAUST RISER | (AC) | AIR CONDITIONING RISER |
| (WS) | WET STACK EXH. RISER | BD | BACKDRAFT DAMPER |
| V.D. | VOLUME DAMPER | BG | BOTTOM GRILLE |
| 3-WAY | 3-WAY CONTROL VALVE | CD | CEILING DIFFUSER |
| U | UNION | CG | CEILING GRILLE |
| L/D | LOUVERED DOOR | CR | CEILING REGISTER |
| B | BALANCING VALVE | -N- | CHECK VALVE |
| H | HUMIDISTAT | -M- | CONTROL VALVE MOTOR OPERATED |
| G | GATE VALVE | OA | OUTSIDE AIR |
| MX | GATE VALVE | — | PIPE RISING |
| M | MOTORIZED DAMPER | — | PIPE TURNING DOWN |
| FD | FIRE DAMPER | — | PRESSURE GAUGE |
| U/C | UNDER CUT DOOR | — | PRESSURE RELIEF VALVE |
| A.P. | ACCESS PANEL | — | PRESSURE REDUCING VALVE |
| T.R. | TOP REGISTER | R/A | RETURN AIR |
| T.R.G. | TRANSFER GRILLE | — | STRAINER |
| T.G. | TOP GRILLE | — | THERMOMETER |
| | | — | THERMOSTAT |

EQUIPMENT SCHEDULE

- ① COOLING TOWER: SHALL BE COUNTERFLOW-BLOW-THRU TYPE UNIT SHALL HAVE A CAPACITY TO COOL 1650 GPM FROM 95°F TO 85°F WITH 78°WB AMBIENT AIR. UNIT SHALL HAVE 4-20 HP FAN MOTORS SUPPLIED WITH 2-5 KW IMMERSION HEATERS. WEIGHT: 14800 LBS.
- ② HEAT EXCHANGER: SHALL BE A PLATE AND FRAME TYPE WITH A CAPACITY TO COOL 1650 GPM OF WATER ENTERING @ 99.7°F AND LEAVING @ 89.2°F WITH 1650 GPM OF TOWER WATER ENTERING @ 85°F MAX. PRESSURE DROP SHALL BE 16 P.S.I. ON BOTH WATER LOOP SIDES.
- ③ CONDENSER WATER PUMP N°1 (PRIMARY) 1650 GPM @ 55 FT HEAD, 40 HP DOUBLE SUCTION CENTRIFUGAL TYPE, 1750 RPM. 8" X 10" X 1/2"
- ④ CONDENSER WATER PUMP N°2 (PRIMARY) 1650 GPM @ 65 FT HEAD, 40 HP DOUBLE SUCTION CENTRIFUGAL TYPE, 1750 RPM. 8" X 10" X 1/2"
- ⑤ CONDENSER WATER PUMP N°3 (STANDBY) 1650 GPM @ 65 FT HEAD, 40 HP DOUBLE SUCTION CENTRIFUGAL TYPE, 1750 RPM. 8" X 10" X 1/2"
- ⑥ CONDENSER WATER PUMP N°4 (PERIMETER) 1300 GPM @ 45 FT HEAD, 20 HP END SUCTION CENTRIFUGAL TYPE, 1750 RPM.
- ⑦ CONDENSER WATER PUMP N°5 (INTERIOR) 678 GPM @ 50 FT HEAD, 15 HP END SUCTION CENTRIFUGAL TYPE 1750 RPM.
- ⑧ CONDENSER WATER PUMP N°6 (COMMERCIAL & 1ST FLR LOBBY) 163 GPM @ 65 FT HEAD, 5 HP END SUCTION CENTRIFUGAL TYPE 1750 RPM.
- ⑨ CONDENSER WATER PUMP N°7 (STANDBY) 1300 GPM @ 45 FT HEAD, 20 HP END SUCTION CENTRIFUGAL TYPE 1750 RPM.
- ⑩ AIR REMOVAL FITTING: IN-LINE TYPE 0" SIZE, 1680 GPM @ 7 FT MAX P.D.
- ⑪ EXPANSION TANK: 270 GAL. CAPACITY, CLOSED TYPE. 30" DIA & 76" LONG
- ⑫ CONDENSER WATER STORAGE TANK PUMP: 150 GPM @ 45 FT HEAD, 5 HP IN-LINE CENTRIFUGAL TYPE 1750 RPM
- ⑬ CONDENSER WATER STORAGE TANK: 6000 GAL. EA. CAPACITY FLR. MOUNTED TANKS
- ⑭ EMERGENCY GEN. DIESEL FUEL STORAGE TANK: 60 GAL. CAPACITY FLR. MOUNTED TANK
- ⑮ FIRE PUMP DIESEL FUEL STORAGE TANK: 500 GAL. CAPACITY, UNDERGROUND TANK
- ⑯ DIESEL FUEL PUMP (SUPPLY FIRE PUMP) 2 REQUIRED ONE STANDBY EACH TO PUMP 22 GPH OF DIESEL FUEL @ 10 PSI DISCHARGE PRESSURE 1/4 HP 1800 RPM MOTOR, WITH SUCTION LIFT OF 10 FT PUMP INLET HEIGHT NOT TO EXCEED 5 FT ABOVE PUMP RM FLR.

